In the claims:

1. (original) A system for securing a mass within the breast of a human patient, said system comprising:

a cryogenic adhesion probe comprising a tube adapted for insertion into the body of the patient, said tube having a proximal end, a distal end, a proximal segment, and a distal segment, said proximal segment having a larger outer diameter than the distal segment; said distal segment having a penetrating element adapted for piercing the mass;

a cutting cannula disposed about the tube, said cutting cannula characterized by a proximal end and a distal end, said cutting cannula having an inner diameter larger than outer diameter of the distal segment of the adhesion probe;

a fluid actuator comprising a first piston slidably disposed within a cylinder, a first chamber on one side of the first piston and a second chamber on the other side of the first piston, said first piston being longitudinally fixed to the cutting cannula; and

a canister of liquefied gas and means for selectively supplying liquefied gas from the canister to the adhesion probe, the first chamber and the second chamber.

2. (original) The system of claim 1, wherein the canister is disposed at a substantial angle relative to the adhesion probe,

whereby the canister is disposed in an inclined position when the adhesion probe is horizontally oriented.

3. (original) The system of claim 1 or 2 wherein the means for selectively supplying liquefied gas further comprises:

a first valve with and input connected to the canister and an output connected to the adhesion probe;

a second valve having an input connected to the outlet of the first valve and an output connected to the first chamber;

a third valve having an input connected to the outlet of the first valve and an output connected to the second chamber;

valve operating means for selectively operating the first valve, second valve, and third valve.

4. (original) The system of claim 3 wherein the means for selectively operating the first valve, second valve, and third valve comprises:

a control system and electromechanical valve actuators operably connected to the valves, said control system being operable to operate the first valve for a predetermined period, and operate the second valve, upon expiration of the predetermined period, to advance the cutting cannula, and permit a user of the device to selectively operate the third valve to retract the cutting cannula.

5. (original) The system of claim 4 further comprising:

a battery operably connected to the control system;

means for sensing the condition of the first valve;

wherein the control system is programmed to operate the first valve from a closed position to an open position, and, after a predetermined period, operate the first valve from the open position to the closed position, said predetermined time period being about 0.5 to 1.0 seconds.

6. (original) The system of claim 4 further comprising:

a battery operably connected to the control system;

means for sensing the condition of the first valve;

wherein the control system is programmed to operate the first valve from a closed position to an open position, and measure the time required to operate the first valve from the first predetermined position to a second predetermined position, and thereafter operate the valve upon operator input, to operate the first valve toward the open position for a period of time calculated on the basis of the measured time and a desired period of coolant flow through the adhesion probe.

7. (original) The system of claim 4 wherein:

the fluid supply tube is sized and dimensioned to permit fluid cryogen flow of about 0.01 to .25 grams per second to the tip of the adhesion probe when fluid is supplied at a pressure of about 850 psi at room temperature;

the canister of liquefied gas is filled with CO_2 at a pressure of about 850 psi at room temperature.

8. (original) The system of claim 4 further comprising:

the fluid supply tube is sized and dimensioned to permit fluid cryogen flow of about 0.01 to .25 grams per second to the tip of the adhesion probe when fluid is supplied at a pressure of about 850 psi at room temperature;

the canister of liquefied gas is filled with CO_2 at a pressure of about 850 psi at room temperature.

9. (original) The system of claim 4 further comprising:

the fluid supply tube is sized and dimensioned to permit fluid cryogen flow of 0.01 to .25 grams per second to the tip of the adhesion probe when fluid is supplied at a pressure of about 800 psi at room temperature;

the canister of liquefied gas is filled with N_2O at a pressure of about 800 psi at room temperature.

10. (original) The system of claim 4 wherein;

the control system is programmed to count the number times which it operates the system, and to limit the number of operations to a predetermined number of operations.

11. (original) The system of claim 4 wherein valve operating means comprises electromechanical valve actuator system further comprising:

a motor operable connected to a jack screw and jack screw nut;

a first cam disposed in interfering relation to the jack screw nut at a first position, said cam sized and

dimensioned to operate one of the valves when rotated by jack screw nut;

a second cam disposed in interfering relation to the jack screw nut at a second position, said cam sized and dimensioned to operate another one of the valves when rotated by jack screw nut.

12. (original) The system of claim 4 wherein valve operating means comprises electromechanical valve actuator system further comprising:

a motor operable connected to a jack screw and jack screw nut;

said jack screw nut disposed in line with a valve stem of the first valve, such that movement of the jackscrew nut results in movement of the valve stem of the first valve;

a first cam disposed in interfering relation to the jack screw nut at a first position, said cam sized and dimensioned and positioned such that movement of the jackscrew nut to the first position may result in rotation of the first cam, causing the first cam to operate the second valve when rotated by jack screw nut;

a second cam disposed in interfering relation to the jack screw nut at a second position, said second cam sized and dimensioned and positioned such that movement of the jackscrew nut to the second position may result in rotation of the second cam, causing the second cam to operate the third valve when rotated by jack screw nut.